

# Protestant Missionaries Are Associated With Reduced Community Cohesion

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*Do Protestant missionaries affect community cohesion? This study puts forth two mechanisms that link missionaries to trusting, cooperative community life: pro-social preferences and social networks. On the one hand, Protestant missionaries espouse charity, and they establish regular venues of social interaction. On the other hand, Protestant missionaries propagate an individualist faith, and they provide an identity along which communities may separate. The effect of Protestant missionaries on community cohesion is thus unclear. To make headway on these conflicting theoretical predictions, we study variation in missionary activity in southeastern Peru. We document that villages with Protestant missions show lower levels of community cohesion compared to non-missionized, Catholic villages. We point to weakened networks as the most likely causal channel and show that effect sizes are particularly large among Pentecostal missionaries.*

*Key words:* Latin America; Protestant Christianity; social change; missionaries; community cohesion.

Religious beliefs and practices are widely believed to affect community cohesion. Protestantism, in particular, has been found to correlate positively with generalized trust (Guiso, Sapienza, and Zingales 2003) and cooperation (Anderson and Mellor 2009). The association is particularly pronounced among relatively liberal Protestant denominations (Schwadel et al. 2016:169). In developing countries, scholars have pointed to Protestant missionaries as key drivers of community cohesion. For example, Lankina and Getachew (2011:475), discussing Protestant missionaries in India, write that “missionary organizational activity [ . . . ] contributed to the development of civil society.” And Woodberry (2012:253) argues that Protestant missionaries “instill[ed] voluntarism and charity.”

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A different set of scholars, however, maintains that Protestant churches have a tendency to disintegrate, subsequently dividing communities along religious lines (Zaleski and Zech 1995). Historical evidence ranges from the Great Schism to the French Wars of Religion. The logic behind such religious splintering is simple: because religious groups offer excludable goods, religious entrepreneurs gain from founding new churches (Berman 2000). The tendency to split apart is particularly pronounced among conversionary Protestants, who “tend toward separation and independence” (Shah and Woodberry 2004:48) as well as strict denominations (Iannaccone 1994). As a result, Schwadel (2005:159) argues that churches may “limit network heterogeneity and thus limit the opportunity for bridging social capital.”

In light of these conflicting accounts, this study revisits the relationship between Protestant missionaries and community cohesion. Our empirical focus is on agrarian, Catholic villages in Peru, which witnessed the advent of different types of local Protestant missionary groups in the 1990s. We hypothesize that Protestant missionaries affect community cohesion via two channels: pro-social preferences and social networks. Importantly, the direction in which missionaries activate both channels is ambiguous. On the one hand, Protestant missionaries espouse charity, and they establish regular venues of social interaction. On the other hand, Protestant missionaries propagate an individualist faith, and they provide a new identity along which communities may separate. The effect of Protestant missionaries on community cohesion is thus unclear.

To make headway on these conflicting theoretical predictions, we study variation in missionary activity in Peru’s Cusco region. Partly due to activities of the guerrilla movement Shining Path (*Sendero Luminoso*), the region saw reduced missionary activity throughout much of the 1980s. The defeat of the rebels in the early 1990s led to a rise in Protestant missionary activity. Local villages saw two different kinds of missionary groups take root: Evangelicals (including Seventh-day Adventists and Israelitas) and Pentecostals (including the Iglesia Cristiana Maranatha and the Iglesia Evangélica Peruana). Our comparison group is villages where no Protestant mission was planted and which remained Catholic.

Drawing on unobtrusive behavioral experimental games administered in a survey of 1,024 residents across sixteen villages, we find that villages with Protestant missions show significantly *lower* levels of community cohesion. Residents in missionized villages are 10 percentage points less likely to invest in a trust game, 17 percentage points less likely to sign a community proposal, and 10 percentage points less likely to donate money toward a public good. A comprehensive community cohesion index is 0.27 standard deviations lower in proselytized villages compared to Catholic comparison villages. Importantly, the reduction is particularly pronounced in Pentecostal villages, while the reduction is only weakly negative—and, in the case of Adventist villages, even slightly positive—in villages exposed to Evangelicals.

Why are villages with Pentecostal missions shaped by lower levels of community cohesion? Turning to the two proposed mechanisms, we show that both pro-social preferences and network density are lower in missionized villages. Yet, when moving to a causal mediation framework, we find that the effect is predominantly mediated through the network mechanism. What is more, the negative effects—both on community cohesion and social networks—are particularly pronounced in Pentecostal villages. Drawing on qualitative evidence, we argue that two key variables set Pentecostal missionaries apart from Evangelicals in our setting. First, Pentecostal church services are significantly longer and stricter compared to Evangelical church services. Second, Pentecostal missionaries enforce stricter rules, particularly regarding the consumption of alcohol. Both mechanisms help explain why villages with Pentecostal missionaries show lower levels of community cohesion.

Our paper adds to the study of religion and community cohesion in two ways. First, we present rivaling logics about the effect of Protestant missions on community cohesion so as to strengthen the theoretical literature. Second, to our knowledge, the paper is amongst the first to provide rigorous evidence regarding the effects of Protestant missionaries on community cohesion, paying careful attention to denominational differences within Protestantism. In sociology, prior research has found that Protestant missionaries increase individualism (Smith 1994; Stoll 1990), raise in-group contact (Feichtinger 2016), and encourage more hierarchical social structures (Montero 2012; Swatos 1994). With respect to Latin America, sociological studies have shown missionaries to foster community cohesion (Cavalcanti 2005) and enhance transnationalism (Swatos 1994). In economics and political science, missionaries have been associated with democratization (Woodberry 2012), education (McCleary 2013; Valencia Caicedo 2019; Waldinger 2017), and pro-social behavior (Bergeron 2019; Falk et al. 2018; Shariff and Norenzayan 2007; Valencia Caicedo and Voth 2018). Across the social sciences, however, rigorous evidence linking Protestant missionaries to community cohesion remains scarce—a gap this study seeks to fill.

## THEORETICAL BACKGROUND

How may Protestant missionaries affect community cohesion? This paper follows Chan, To, and Chan (2006) in defining community cohesion as *levels of trust, cooperation, and identification in a local community*. In what follows, we argue that two mechanisms are particularly pivotal in linking Protestant missionaries to community cohesion. The first channel hones in on the effect of missionaries on pro-social preferences (*preference mechanism*). The second channel captures Protestant missionaries' impact on social networks (*structure mechanism*). Importantly, for both mechanisms there are competing logics, implying that

Protestant missionaries may either increase or decrease community cohesion. We discuss both channels in turn.

### ***Preference Mechanism: Pro-Sociality***

The first channel through which Protestant missionaries may affect community cohesion are pro-social preferences. Pro-social preferences—preferences over another individual's material wellbeing—may affect community cohesion for a number of reasons. For one, taking an interest in the material benefit of others is arguably a necessary condition for individual-level *identification* with a greater community. Pro-social preferences also likely spur *trust* in fellow community members. Similarly, pro-social preferences may induce individuals to *cooperate* as well as to forgive when such cooperation is not reciprocated.

How do Protestant missionaries affect pro-social preferences? On the one hand, Protestant missionaries are known to espouse charity; on the other hand, Protestant missionaries endorse an individualist faith. We lay out these conflicting predictions in turn.

### *Charity.*

A core preaching of Protestant missionaries is that believers must do good unto others, which should arguably improve community cohesion.<sup>1</sup> Historical accounts display Protestant missionaries as strong advocates of pro-sociality. For instance, Little (2005:207–8) notes that the “Protestant missionary ethos originally focused on [ . . . ] charity.” And the missionary S. Joseph Kidder writes that missionaries “need to come to the point of loving as Jesus loves; he commanded us to even love our enemies” (2012:125). Relatedly, Woodberry (2012:253) argues that the missionary focus on charity is a way to assure funding: “Because they do not have the ability to tax their members, nonstate religious groups had to instill voluntarism and charity in their congregants to survive.”

Accounts from Latin America support the notion that Protestant missionaries espouse pro-social preferences. Olson (2006:897) highlights that Protestant missionaries propagate “clear guidelines for behavior, including [ . . . ] [a] strong community.” The author continues that such values “have been identified as characteristics of Evangelical movements [across] Latin America.” In a study of Protestantism in rural Colombia, Brusco (2011:128) demonstrates that Protestant communities place strong emphasis on forgiveness and charity. The author attributes this to Evangelicals' focus on Biblical teachings. She writes: “[a]mong evangelicals, then, the ‘priesthood of all believers’ exists not only on a doctrinal level but also is put into extensive practice and establishes an ethic of reading, contemplating and analysis.”

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<sup>1</sup>For the purpose of this study, we define charity as pro-social behavior—i.e., “the giving of money, food, or help to those who need it” (Cambridge Dictionary).

In the context of Peru, the relation between Protestant missionaries and charity is arguably complicated by the fact that the Peruvian state favors the Catholic Church, including in the Peruvian Constitution of 1993 (e.g., Article 50). In an evaluation of taxation of religious entities in Peru, Huidobro (2019:64) highlights the educational, medical, and social support provided by the Catholic Church and the intricate fiscal interdependencies with the government. Indeed, Article 1 in Legal Decree 626 passed on November 30, 1990 grants the Catholic Church fiscal immunity. Given these interdependencies, Protestant missionaries in Peru therefore arguably have an additional contextual incentive to demand charity from their members.

In the author's own qualitative fieldwork, elaborated on below, Protestant missionaries regularly emphasized the importance of charity. Sermons frequently included references to forgiveness and the need to “do good unto others.” Ministers reminded fellow believers of the importance to “put the community first.” One minister said his prime social teaching was to abstain from “antisocial behavior such as drinking, stealing and all the things that are bad for the community.” Such behavior, another minister argued, “is demanded from good Christians in order to make it to heaven.” Taking these accounts together, Protestant missionaries may thus increase pro-social preferences, which arguably fosters community cohesion.

- Hypothesis 1a: Protestant missionaries increase pro-social preferences.

#### *Individualism.*

Protestantism, however, is also commonly described as a religion that prizes the individual, which may lead one to expect that Protestant missionaries reduce community cohesion. Widely known is Max Weber's thesis about the relationship between Protestantism and the entrepreneurial, individualistic spirit of capitalism (Weber 2002). In the context of Protestant proselytism, for instance, Shah and Woodberry write that “people can acquire saving faith only as they personally and individually appropriate God's word” (2004:48). Similarly, Woodberry (2012:249) argues that conversionary Protestants “expected lay people to make their own religious choices. They believed people are saved not through sacraments or group membership but by 'true faith in God'.”

In Latin America several commentators have highlighted Protestantism's emphasis on individualism. In one anthropological study of Protestant conversion processes among Mayas in Guatemala, Goldin and Metz (1991:34) trace out a distinct emphasis on “individualism and the bettering of oneself by relying on one's own efforts and hard work.” Bot (1999:169), too, underlines that Protestants in Latin America display a “new approach to religion [that] take[s] place at the level of the individual.” Gill (1993:182) attributes Evangelicals' individualism to the increasingly atomized realities of modern life: “Given the growing atomization of social life, it should come as no surprise that the ideology of many new religious organizations, particularly those espousing Protestant fundamentalism, emphasizes individualism and self-sacrifice as a means of personal improvement.”

A similar picture of missionaries prioritizing the individual emerged in our own qualitative fieldwork. We frequently witnessed ministers making references to individual salvation. The primacy of one's hard work was another recurring theme. All this based on the idea that "salvation lies within," as one minister said. Interestingly, the Protestant missionaries' focus on the individual was intricately linked to religious conversion away from Catholicism. That is, Protestant missionaries argued that conversion was a matter of individual choice. This logic contrasts sharply with the Catholic notion that all believers are automatically Christians by virtue of their parents' faith and their own infant baptism (Smith 1994:133).

If Protestant missionaries spark individualism, this causal mechanism arguably consists of two sub-mechanisms. First is the notion that Protestant missionaries encourage an inward focus, which, as was argued, may result in a lack of concern for the community's broader interests. Second is the idea that Protestantism emphasizes individual responsibility for personal salvation, which, too, may lead to an abstention from community rituals and relationships that threaten to implicate individuals in "sinful activities." In the communities under study, this holds particularly true with regard to the consumption of alcohol. Both sub-mechanisms, however, lean in the same direction and will be analyzed jointly in the empirical section. Taken together, then, Protestant missionaries' endorsement of individualism may lead to a reduction in pro-social preferences, which may arguably reduce community cohesion.

- Hypothesis 1b: Protestant missionaries reduce pro-social preferences.

### ***Structure Mechanism: Social Networks***

The second mechanism through which Protestant missionaries may affect community cohesion are social networks.<sup>2</sup> Dense social networks have long been argued to be a key underpinning of social cohesion (Gargiulo and Benassi 2000). Local-level cooperation thrives when individuals can rely on strong ties in their many daily interactions. While the effect on identification and trust is less mechanical such outcomes, too, likely suffer when networks are sparse. How do Protestant missionaries affect social networks?

The advent of a missionary group offers new goods to local communities. While historic Catholic missionaries offered a broad menu of goods, including education (Valencia Caicedo 2019; Waldinger 2017), modern-day Protestant missionaries offer more targeted religious services. Particularly relevant, here, is the Protestant focus on individual liberation and economic empowerment.

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<sup>2</sup>NB: the difference between "networks" and "cohesion" merits justification. In this paper, we take the view that cohesion captures longer-term outcomes, such as identification, while the proposed network mechanism focuses on short- to medium-term transactions between villagers, which are affected by missionaries. We caution, however, that one could conceive of networks as being a constituent part of community cohesion and that the causal arrow may run into the opposite direction.



Once converts become part of the new church, they can draw on a new network of relationships and the offering of “private goods,” which may, in the words of [Stoll \(1993:15\)](#), “empower[s] individuals.” Yet, whether the aggregate effect of Protestant missionaries on village networks is positive or negative is disputed, and we discuss both potential effects in turn.

*Weakened village networks: Churches as clubs.*

The advent of a missionary group means that the structure of the village changes, assuming that missionaries successfully convert residents. A long research tradition in the social sciences has pointed out pronounced effects of religious organizations on social networks ([Smilde 2005](#); [Stamatov 2010](#)). A particularly influential view is that churches work as “clubs,” in which believers provide private goods to one another ([Berman 2000](#); [Iannaccone 1992, 1994](#)). [Scheve and Stasavage \(2006\)](#), for instance, demonstrate that religion and state spending are substitutes that ensure believers against adverse events.

Scholars of missions confirm the profound reconfiguration of social structures that results from missionary activity ([Smilde 2005](#)). [McCauley \(2012\)](#), focusing on Pentecostal missions in sub-Saharan Africa, concludes that missionaries establish new patronage-like relationships, which cut through existing social networks. [Goldin and Metz \(1991:334\)](#) find that Protestant communities see the “formation of clearly identifiable networks (e.g., addressing each other as ‘brother’ and ‘sister’).” And [Bot \(1999:168\)](#) argues that missionary groups proliferate in a disintegrating social and economic fabric and have “success in penetrating even well structured and homogeneous indigenous communities.” Finally, [Walsh-Dilley](#), studying Bolivia, underlines that Protestant missionaries challenge vertical networks: “Protestantism challenges institutions and social hierarchies that are deeply embedded in Bolivian society, creating deep tensions and potentially leading to social disintegration” ([2019:516](#)).<sup>3</sup>

- Hypothesis 2a: Protestant missionaries weaken social networks.

*Strengthened village networks: Protestantism as empowerment.*

There are, however, also voices that see positive effects on village networks as a result of Protestant missionary activity. [Bot](#), for instance, argues that

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<sup>3</sup>It is important to underscore that the hypothesized negative impact of missionaries on local networks and beliefs predates the advent of Protestantism in Peru. After the Spanish invaded Peru in 1532, a salient act of “governance” was the destruction of the Coricancha, the center of the Inca state religion ([MacCormack 1991:64](#)). Riding the coattails of the Spanish, Jesuit missionaries, like Jesuit José de Acosta, began to convert indigenous Peruvians, turning the Coricancha into a Dominican monastery. In Cusco, writes [MacCormack \(1991:342\)](#), “Spaniards ousted the Inca inhabitants from their dwellings, [taking] possession of the land by first desecrating holy places and then occupying dwellings and fields.” As early as 1780 anti-colonial uprisings began to take hold. The Bishop of Cuzco, however, called the clergy to arms to suppress the uprising, highlighting the intertwining of Catholic missionaries and the colonial administrators.

“Pentecostalism first takes root among the poorest, the most marginalised and the most disempowered, along fault lines which for a time are thereby deepened even if at a later stage they are overcome and community cohesion is restored” (1999:168). The author thus highlights that cohesion may be undermined at first before, perhaps, being restored. Similarly, Stoll, reflecting on Latin America more broadly, highlights that “Evangelical groups have often been criticized in Latin America for separating their members from the larger society” (1993:15). Yet, the author also points out that “numerous local studies suggest that evangelical congregations have at least become a way for significant minorities of Latin Americans to reform themselves,” thus creating “new kinds of social cohesion which empower members.”

At a minimum, the link from Protestant missionaries to networks is thus decidedly shaped by contextual factors. A recent study on Protestant missionaries in Bolivia, for instance, makes the case that the introduction of a new denomination to a mainly Catholic society likely has detrimental effects (Walsh-Dilley 2019:516) at first. However, the author argues that whether the advent of a new denomination leads to cooperation or fragmentation depends on existing social networks: “I suggest that strong local networks of reciprocity and cooperation have the potential to create shared spaces where wounds between antagonistic groups can be healed and shared social experiences can help to rebuild feelings of mutuality and trust. That is, reciprocity networks can serve as intervening variable that enables rural Andean people to overcome the social fragmentation of religious change” (Walsh-Dilley 2019:517). A second, alternative hypothesis is thus as follows:

- Hypothesis 2b: Protestant missionaries strengthen social networks.

## EMPIRICAL DESIGN

### *Variation in Missionary Activity*

To explore whether Protestant missionaries affect community cohesion, we study variation in missionary activity sparked, partly, by the rise and fall of the Peruvian rebel group *Sendero Luminoso* (henceforth, Shining Path).<sup>4</sup> In April 1980, Abimael Guzmán addressed the *First Military School of the Communist Party of Peru-Shining Path*: “Comrades: Our labour has ended, the armed struggle has begun [ . . . ]. The invincible flames of the revolution will glow” (cited in Starn 1995:399). The following weeks marked the beginning of a violent insurgency that shook Peru throughout the 1980s and early 1990s. In subsequent years, the rebels fought the badly trained authorities throughout Peru’s rugged countryside, winning over a sizable share of local residents. Some peasants welcomed the departure of local authorities, which were widely perceived as corrupt. The

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<sup>4</sup>A companion study, assessing the effect of Protestant missionaries on political authority, is provided in Rink (2018).



Sendero's punishment of adulterers and thieves resonated with local norms and a perceived inefficiency of the state. That said, the rebels, writes [Gorriti \(2000:xi\)](#), killed "rural farmers, community leaders, police officers, mayors, Protestant ministers and students." About half of the villages in our sample suffered deaths and disappearances (see [figure 1](#); we assess the determinants of the Shining Path in [figure A12](#)).

The rebels cultivated a particularly tense relationship with Protestant missionaries. [del Pino \(1996\)](#), for instance, provides evidence from the Apurimac region, which borders this paper's area of study, where Pentecostals portrayed the Shining Path as "demons" and fought against them. The Catholic Church, too, was a target of the rebels. [Kent \(1993:451\)](#) recounts an event in 1987 where "the Shining Path launched a frontal attack on [ . . . ] Catholic Church activists." Historical accounts from Evangelical ministers, too, underline the hostile relationship between the rebels and Protestant missionaries. Samuel [Escobar \(1986:10\)](#), for example, highlights that "Evangelical pastors and lay leaders who were perceived as ideological enemies were [ . . . ] killed mercilessly." A chilling example is provided by [Switzer \(1993:61\)](#): "In August 1990, [ . . . ] [the Shining Path] attacked and killed two Mormon missionaries near Huancayo. A handwritten note left near the bodies demanded that all 'Yankee invaders' leave Peru."

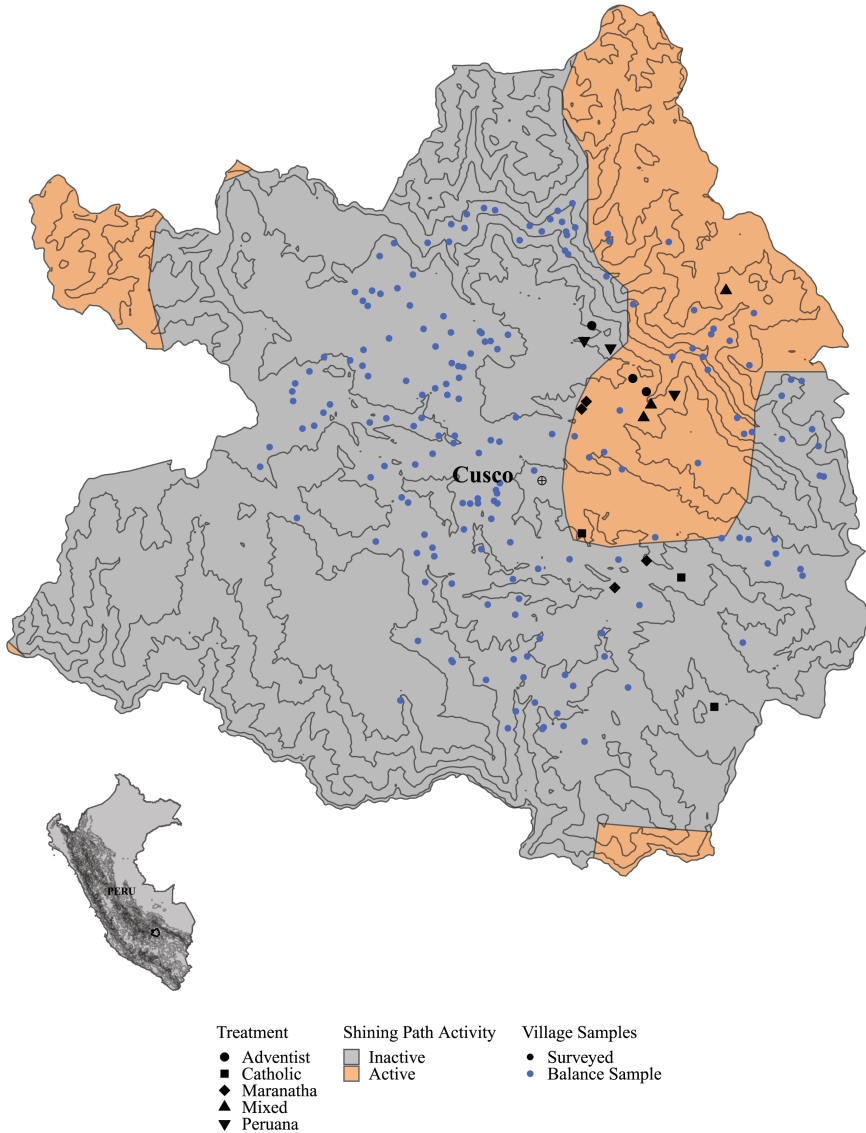
Crucial for our empirical design: the Maoist insurgency caused a significant drop in Protestant evangelism in areas penetrated by the rebels. While the 1980s saw a stark increase in Protestant activities throughout Latin America ([Stoll 1990](#)), several areas of Peru became off-limits to missionaries. Foreign missionary organizations advised against travel into the region, partly because proselytism was ineffective in rebel-held territory. The area in the valleys around Cusco, too, witnessed comparatively less pronounced proselytism. Most villages remained Catholic.

The capture of the Sendero's leader, Guzmán, in 1991 sparked renewed missionary interest in the region. As soon as the valleys were considered safe, Protestant groups began planting churches in the communities near Cusco, creating variation in missionary activity, which we examine in this study. For logistical reasons, the missionary impact was particularly stark in villages near the city of Cusco, from which most church planting was organized. Importantly, the missionaries left out some villages. These villages serve as the comparison group—the counterfactual case of what villages would look like today, had missionaries not been present.

### **Population**

Our population of interest are agrarian communities in southeastern Peru where the Shining Path hampered proselytism throughout the 1980s. Based on qualitative research in the region, we identified villages in the vicinity of the city of Cusco as a particularly relevant population for three reasons. First, given the activities of the Shining Path, the area saw little missionary activity in the 1980s.

FIGURE 1 Map of Population and Sample.



*Notes:* The map shows the study’s population, which is defined as rural villages in the vicinity of Cusco. The villages were obtained on the basis of the 1993 Peruvian census; only villages which could be geo-coded using Open Street Maps are shown (blue dots). Black squares/circles are sampled villages with the indicated presence of Protestant missionaries. Areas shaded in orange suffered from disappearances or killings related to the Sendero Luminoso as reported in the Truth and Reconciliation Commission’s report.

This does not mean that missionary activity after 1990 was “random,” nor that there were no historic missions at all. But, the fact that proselytism was kickstarted in the 1990s in this area meant that (i) the advent of missionaries across villages

was less likely to be plagued by endogeneity given the lack of careful planning and long-term strategizing on behalf of missionaries, and (ii) created a similar time frame of missionary activity across villages. Second, villages in the vicinity of Cusco arguably represent “typical cases” of to-be proselytized villages. The villages are neither suburbs, nor are they far in the hinterland. Third and related, missionaries tend to start in major cities and then work their way inward. For this reason, many villages near Cusco ultimately saw missionaries take root (though not all—a fact we make use of in this study).

To characterize the population of villages, we drew a circle around the city of Cusco with a radius such that the farthest village in our sample was included (see [figure 1](#)). We then accessed the Peruvian census of 1993 and obtained all villages and settlements in the area. To locate the villages on the map, we turned to Open Street Maps, which left us with a total population of 123 villages. Population descriptives are provided in [figure A.2](#).

### Sample

To study our population of interest, we selected 16 villages. The selection procedure was not random. Rather, we selected the villages so as to balance geographic, linguistic, and agricultural variables. Moreover, we also focused on communities with a sufficiently large population size so as to ensure the seamless implementation of several behavioral games. Finally, we chose the 16 villages to ensure an equal split across the different missionary groups (more below). Reassuringly, [figure A2](#) shows that the villages are broadly representative of the overall population, though there are differences regarding occupational choices and education levels.

### Missions

The sixteen villages witnessed the advent of five different missionary groups, which we introduce next. An overview is provided in [table A1](#).

The *Catholic* comparison category captures communities that were never evangelized and were thus consistently Catholic. The control villages are thus our counterfactual. The reason why the villages were not proselytized remained unclear. Reassuringly, control villages are highly similar to proselytized villages (more below).

The *Adventist* category captures villages missionized by the *Seventh-day Adventist* church. Compared to the Pentecostal missions in our study context, Adventists espoused a milder form of Evangelicalism with shorter services and more space for communal life. Ministers displayed a somewhat critical engagement with scripture and abstained from charismatic elements such as speaking in tongues. In comparison to stricter missionary groups (more momentarily), Adventist missionaries also displayed themselves as outgoing, taking an active interest in community life. Importantly, Adventists observe Saturday instead of Sunday as Sabbath and also espouse a vegetarian/healthy diet. The latter became a motive for missionary activity early on. As Ellen White writes: “A

vision about ‘health reform’ in 1863 gave impetus to the young church’s interest in establishing hospitals, nursing schools and ‘medical missionary’ work” (Carr and Johnston Taylor 2009:708). Even today, writes Feichtinger, “Adventists regularly point to a number of scientific studies that suggest that they have a longer and healthier life span than others, although there is variation in Adventist practice” (2016:390).

The *Peruana* category captures villages missionized by the Pentecostal church *Iglesia Evangélica Peruana*. The Peruana mission was noticeably more spiritual and ministers included many charismatic elements in their services. As such, the Peruana mission “follows the ‘biblical Christianity’ commonly associated with Evangelical Christian churches in the United States and other Evangelical churches of Latin America” (Olson 2006:890; see also, Barreda 1993). The church has “very clear guidelines for behavior: no drinking, no practices that could constitute idolatry, strong family; and strong community” (Olson 2006:897). A major aspect of the *Iglesia Evangélica Peruana* is its opposition to Catholicism: “It is most obvious in the ‘creation’ myths of the church at national, regional, and even individual, church scales, where liberation from the oppressive state and societal power structures of the Catholic Church is a common theme in the arrival of the evangelio (gospel)” (Olson 2006:891).

The *Maranatha* category captures villages that saw the Pentecostal *Iglesia Cristiana Maranatha* take root. The Maranatha mission calls itself charismatic. Church services included manifold charismatic elements such as speaking in tongues. In comparison to the Peruana and Adventist missions, the Maranatha church leaders displayed little discernible interest in secular issues and community life. Martí characterizes the Maranatha church by its particular way of worship and power-surrender dynamic, “[ . . . ] the surrender of the self in anticipation of the Spirit” (Martí 2018:26).

The *Mixed* category captures villages where more than one Evangelical mission was planted. The missions were mostly Adventists, Maranatha, or Peruana, though one village had a small Evangelical mission called Israelita (for details, see table A1). The theological fervor in the Mixed category therefore ranges between the Adventist and the Peruana/Maranatha missionaries.

### **Addressing Endogeneity**

In order to estimate the effect of the missionary groups on community cohesion, we must assume that there is (i) no reverse causality and (ii) no unobserved confounding. While these assumptions are difficult to verify, we take four steps that allow us to showcase pretreatment balance.

First, we use data from the 1993 Peruvian census—a period that broadly falls in line with the missionary activity in the region. The census provides data on 91 variables, which capture economic development, demographics, and education (see table A4 for details). Importantly, the table shows that most variables are

balanced across the missionary groups relative to the Catholic control group. To test this more rigorously [figure A2](#) plots absolute  $t$ -values estimating differences-in-means across the treatment categories and the Catholic comparison group. Only 3 out of 91 variables have significantly different means between the evangelized villages and the Catholic control group. Reassuringly, balance is also given for the presence of the Sendero Luminoso (see [figure A2](#)), and we detect no heterogeneity in results across Sendero-affected and unaffected communities (see [figure A13](#)). Finally, we should also highlight that we do not detect significant differences across the different missionary groups, notably, the Evangelical and Pentecostal missions (see [figure A10](#)).

Second, we conducted semi-structured interviews with history experts in each village. We asked the experts about the state of the villages in circa 1992, measuring variables that were not part of the 1993 census. Specifically, we inquired about the presence of schools, hospitals, post offices, and football fields in 1992—variables that constitute likely confounders.<sup>5</sup> As can be seen in [table A3](#), the variables are similarly distributed across the evangelized and non-evangelized villages. The table also underlines the relative remoteness of the villages. Schools, hospitals, and post offices were mostly absent in 1992 and continued to be absent at the time of research.

Third, we present five geographic variables, which cannot have been affected by the missionaries. Specifically, in [table A3](#), we report villages' road and geodesic distance to Cusco, elevation, longitude, and latitude. These variables, too, are highly similar across the different treatment categories. The geographic variables are thus further evidence that the reduced form results presented below can be interpreted in a causal manner.

Last, we can assess whether variables in the random population sample that are unlikely to be affected by the missions are similarly distributed. The two variables that stand out, here, are gender and age. Reassuringly, [table A2](#) shows that the different treatment categories have a highly similar average age and gender distribution.

### **Survey and Measurement**

In each village, we administered a large-scale structured survey, enrolling 64 subjects per village. The details of the sampling procedure and the research team are laid out in Section A.1 in the [Supplementary Material](#). The survey served

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<sup>5</sup>Specifically, the variables plausibly reduce the likelihood to receive a missionary group and arguably correlate with increased social cohesion. Schools—like football fields—arguably foster cooperation. At the same time, if missionaries know a village offers high levels of education, they may be less likely to set up a mission post and focus on villages with greater educational needs. Similarly, access to hospitals might result in better community health, while also giving missionaries less of an incentive to plant a church. Post offices, in turn, increase the availability of goods, possibly affecting social cohesion. And, a greater degree of outside contact might make people less susceptible to the missionaries' messages.

TABLE 1 Community Cohesion Measurement

	Trust	Cooperation	Identification
	<i>Invested in trust game</i>	<i>Signed village proposal</i>	<i>Donated toward public good</i>
Sample mean	27.6%	34.8%	54.7%
Catholic control villages	35.4%	48.6%	63.0%
Protestant mission villages	25.8%	31.6%	52.8%

*Notes:* The table reports the average number of individuals who invested in the trust game (Trust), signed the village proposal (Cooperation), and donated toward the public good (Identification).

the purpose of measuring our main outcome of interest, community cohesion, as well as the two hypothesized mechanisms: pro-social preferences and network structures. We exclusively rely on behavioral measures for all core theoretical concepts in order to circumvent social desirability bias. All games and survey items were pretested at length to ensure that respondents fully understood the instructions (pilot rounds are excluded from the analysis). We also opted for widely used behavioral measures, which have been implemented across the globe.

*Community cohesion measurement.*

Our main outcome, community cohesion, comprises three constructs: trust, cooperation, and identification.

We measure trust using the well-known trust game. In particular, each survey respondent was given the opportunity to send any amount of the 2 U.S. Dollars participation compensation to the next respondent. The sender was informed that, should the receiver send any money back, the researchers would double that amount, thereby giving the sender a monetary incentive to send money. In order to streamline the surveying activities, enumerators did not implement the second part of the trust experiment. On average, 28 percent of respondents sent money to the next respondent (see [table 1](#)).

We measure cooperation by asking respondents to sign a proposal. In particular, respondents were asked if they would be willing to support a proposal the researchers had arranged prior to surveying. In the proposal, village or church members (the endorsers were randomized across respondents) proposed to establish a regular meeting to discuss church or community matters. We then asked respondents if they would sign the proposal. On average, 35 percent of individuals gave their signature (see [table 1](#)).

We measure identification using a public donation game aimed at measuring whether respondents were willing to publically contribute any amount of their final compensation fee toward the church or village community (the recipient was, again, fully randomized). The contributions were paid out 6 months later



when our team of research assistants gathered additional qualitative data. On average, 55 percent of respondents donated an amount toward the respective community (see [table 1](#)).<sup>6</sup>

The three behavioral items are combined into a community cohesion index by standardizing the items and averaging across them.<sup>7</sup> We employ the index in the empirical analyses in order to avoid multiple comparisons and to assure a robust measurement of community cohesion. But, all individual items will also be reported separately, given that the three measures capture distinct dimensions of community cohesion.

*Mechanism measurement.*

We measure pro-social preferences using the Random Allocation Game ([Hruschka et al. 2014](#); [McNamara, Norenzayan, and Henrich 2016](#); [Purzycki et al. 2016](#)). The game, as [Xygalatas et al. \(2018:249\)](#) put it, “has been designed to obtain a measure of cheating.” The idea of the game is to ask respondents to distribute money either to themselves or the community according to a clear decision rule, but that this decision is taken in private so that individuals have an opportunity to cheat. To this end, all respondents were given a six-sided die as well as two envelopes. One envelope would be given to the community/church (fully randomized), the other would remain with the individual. Respondents were then given 10 Peruvian Sol coins, which they were asked to distribute to either the community/church or themselves using the die. In particular, respondents were asked to put a coin into the community/church envelope whenever the die showed 3 or less, and to put a coin into the own envelope when the die showed more than 3. Importantly, respondents played the game in private and were instructed to seal the envelopes after the game. Respondents therefore had an opportunity to either play by the rules or to cheat (either acting anti- or prosocially, i.e., putting more coins into the own/other envelope). Thus, as [Xygalatas et al. \(2018:249\)](#) summarize, “although individual cheating cannot be determined, impartial (fair) behavior is gauged at the group level by comparing the statistical distribution of all allocations to that of the binomial distribution that would be expected to arise by random chance.” Put simply, in expectation, five coins should land in both envelopes. If the personal or community envelope receives more or less than half the coins, this is evidence of bias towards the respective entity. On average, individuals allocated 5.2 coins to others (see [table 2](#)).

Finally, we measure network density using a behavioral game intended to measure respondents’ ability to obtain relevant social information. Inspired by a similar measure in [Habyarimana et al. \(2007:719\)](#), we asked respondents to find

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<sup>6</sup>We also administered an attitudinal identification item, asking individuals whether they identify with the community. Results are reported in [figure A11](#), which only shows a treatment effect for one condition.

<sup>7</sup>The index’s reliability, assessed using Cronbach’s alpha, is 0.68.

TABLE 2 Mechanism Measurement

	Pro-social preferences	Networks
	<i>Coins allocated to others (out of 10)</i>	<i>Found out neighbor's age</i>
Mean	5.2	61.9%
Catholic control villages	5.6	71.2%
Protestant mission villages	5.0	59.7%

Notes: The table reports the average amount of coins allocated to others in the Random Allocation Game (pro-social preferences) and the average number of individuals that found out their neighbor's age (network).

out their neighbor's (head of household) age within a time frame of 5 minutes. Respondents claiming to know the answer—a small minority—were asked to confirm their information. On average, 62 percent of individuals found out their neighbor's age (table 2).<sup>8</sup>

**Empirical Model**

To assess the effect of Protestant missionaries on community cohesion, we estimate the following linear model using ordinary least squares (OLS):

$$Y_{il} = \beta_0 + \beta_1 \text{Adventist}_{il} + \beta_2 \text{Mixed}_{il} + \beta_3 \text{Peruana}_{il} + \beta_4 \text{Maranatha}_{il} + X_{il} \beta + \varepsilon_{il} \tag{1}$$

$Y_{il}$  denotes the respective social cohesion measure for individual  $i$  in village  $l$ , *Adventist*, *Mixed*, *Peruana*, and *Maranatha* represent dummies for the respective treatment statuses, and  $X_{il}$  represents a vector of pretreatment controls.

We have well over 100 pretreatment covariates at our disposal, which could be added as control variables (see the section Addressing Endogeneity). To avoid “fishing,” our main model does not include any controls. We also present models that include a host of individual-level control variables, including gender, age, education, income, marital status, occupation, internet accessibility, whether respondents have traveled elsewhere in the past and whether the Shining Path was present. To ensure robustness, in the [Supplementary Material](#), we present a sensitivity analysis that gradually and randomly adds

<sup>8</sup>We must caution that the network measure is not perfectly suited to capture network density. Ideally, one would have mapped the entire village network and then calculated a suitable centrality measure. This was not possible due to budgetary and privacy concerns. Reassuringly, we also asked individuals to name friends and then recorded whether individuals named any friend (without noting down the name, for privacy reasons). This measure arguably also captures social connectedness, though it is purely attitudinal. We see similar effects in missionized villages when using this alternative measure (see [figure A.9](#)).

covariates to the main model. The resulting distribution of coefficients is shown in [figure A.3](#). It shows that all results are robust to this admittedly harsh procedure.

Given the low number of villages (i.e., clusters), the estimation of standard errors is not trivial. If errors are correlated within clusters, OLS tends to underestimate the true level of uncertainty. To address this problem, we follow [Cameron, Gelbach, and Miller \(2008\)](#) in using a wild cluster bootstrap-t procedure in order to estimate standard errors. All results, however, are robust to using traditional sandwich estimators (see [figure A.3](#)). To address the issue of spatial autocorrelation, we also report models with Conley standard errors in [figure A.5](#), which leads to highly similar results. More broadly, spatial autocorrelation is limited in our population, which we show in Section A.2 in the [Supplementary Material](#). The average Moran's *I* in the population across all 93 census variables is 0.02 (see [figure A.1](#)).

## RESULTS

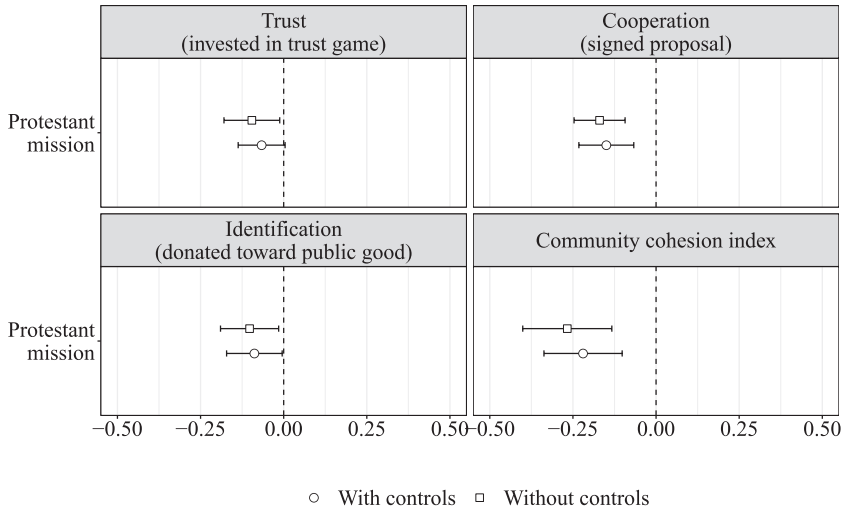
### *Protestant Missions and Community Cohesion*

Are Protestant villages associated with different levels of community cohesion compared to Catholic villages? As discussed, we measure community cohesion using three behavioral items, capturing trust, cooperation and identification. [Figure 2](#) demonstrates that community cohesion is significantly lower in villages with a Protestant mission compared to non-missionized Catholic villages. Specifically, individuals in missionized villages are 10 percentage points less likely to invest in a trust game (37 percent decrease relative to the control group), 17 percentage points less likely to sign a community proposal (53 percent decrease), and 10 percentage points less likely to donate money toward a public good (19 percent decrease). The comprehensive community cohesion index is 0.27 standard deviations lower in villages with a Protestant mission.<sup>9</sup>

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<sup>9</sup>One concern with this finding is that greater community cohesion in Catholic control villages may be due to the fact that the Catholic Church receives funding from the Peruvian government. Four arguments make this alternative explanation rather unlikely. First, the provision of public goods via the Catholic Church is not only limited but also organized by the dioceses. In our case, this means both Catholic villages and Protestant mission villages would benefit from such redistribution. Second, we should reiterate that the Catholic control villages are only nominally Catholic. There was no active Catholic church community. Third, even if Catholic control villages received more redistribution, this cannot explain the differences we detect along the intensive margin (i.e., across different Protestant missionaries; see, [figure 3](#)). Fourth, the treatment effects also pertain to outcomes, which are arguably not affected by the state, e.g., cheating (see, [figure 4](#)). Taken together, it is therefore rather unlikely that the main result is due to the Catholic villages redistributing more money; our qualitative interviewees also did not point us in this direction.

FIGURE 2 Association Between Protestant Missions and Community Cohesion.



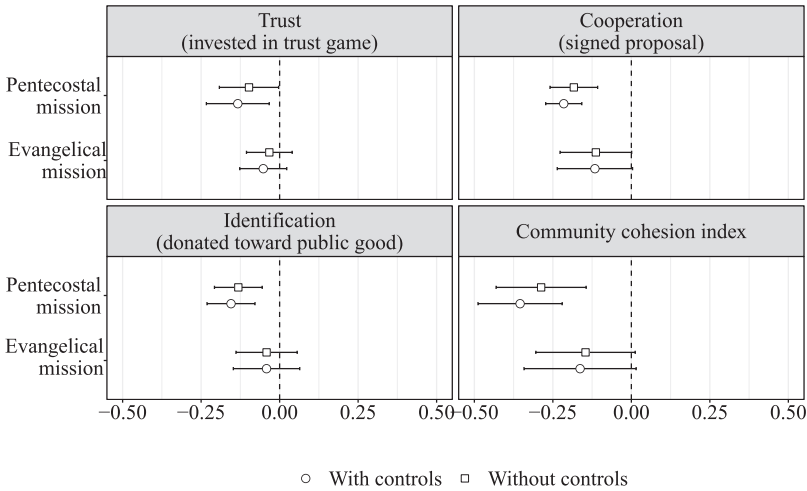
Notes: The figures plot results from a regression of the indicated cohesion outcomes on a combined Protestant mission dummy. Dot/squares denote point estimates, lines denote 95 percent confidence intervals. CIs are estimated using the wild cluster bootstrap-t procedure. The dotted line indicates 0. Models with covariates control for age, gender, education, income, marital status, occupation, internet accessibility, Sendero presence, and whether respondents have traveled elsewhere in the past. All outcomes are in percent, except for the combined index, which is standardized.

### Heterogeneity Across Missionary Groups

Do we observe different effect sizes across the different Protestant missionary groups? In figure 3, we find that treatment effects are larger in villages with Pentecostal missions (Maranatha and Peruana) compared to villages with Evangelical missions (Adventist and Mixed). Indeed, the reduction in community cohesion is only significant among Pentecostal missionaries. Respondents in Pentecostal villages are roughly 20 percentage points less likely to sign the village/church proposal, 22 percentage points less likely to invest in the trust game, and a similar 22 percentage points less likely to donate toward the public good compared to individuals in the Catholic comparison group. The treatment effects in Evangelical villages are negative as well, but smaller and not consistently bound away from zero.

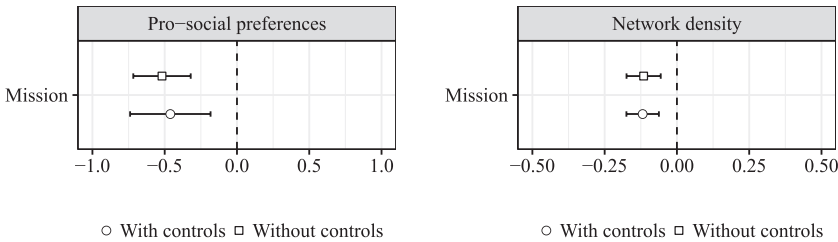
Regarding the four individual Protestant missions (reported in figure A.4), we find that the Pentecostal Peruana mission is most strongly associated with a reduction in community cohesion. The effects are both statistically significant, and substantively meaningful. Villages with Maranatha or Mixed missions witness slightly less pronounced treatment effects, though the estimates continue to be significantly bounded away from zero. By contrast, Adventist villages—those faced with comparatively milder forms of preaching compared to Pentecostal missionaries—are not systematically different compared to the Catholic control communities. Indeed, most Adventist estimates are remarkably close to zero. For the aggregate community cohesion index, the estimate is even slightly positive (though insignificant).

FIGURE 3 Heterogeneity Across Evangelical and Pentecostal Missions.



Notes: The models follow figure 2.

FIGURE 4 Mechanism Outcomes (Protestant Mission vs. Catholic Control).



Notes: The figures plot point estimates (dot/square) and 95 percent confidence intervals (lines) of regressions of the treatment dummies on the indicated outcomes. Dots represent regressions with covariate adjustment, squares represent regressions without covariate adjustment. Standard errors are estimated using the wild cluster bootstrap-t procedure. The pro-social preference outcome ranges from 0 to 10 (i.e., coins given to others), while the network density outcome is given in percent.

## MECHANISM

What causal mechanisms help explain why villages with Protestant missions show lower levels of community cohesion compared to non-missionized Catholic villages? In particular, why do Pentecostal missionaries show stronger negative effects compared to Evangelical missionaries?

We begin by analyzing whether Protestant missionaries affected the two hypothesized mechanisms in the expected direction: reduced pro-social preferences (H1b), and weakened social networks (H2b). First, we regress the measure for pro-social preferences on the joint Protestant mission dummy. Figure 4 shows that Protestant missions are associated with a significant drop in

pro-social preferences. On average, individuals in missionized villages contribute 0.5 fewer coins toward the community/church (Random Allocation Game). The reduction is also visible when splitting the missions into Pentecostals and Evangelicals (see [figure A.6](#)). Importantly, however, the treatment effects do not gain in strength as one moves from Evangelical to Pentecostal missions (see [figure A.7](#)). Notwithstanding, the evidence provides tentative support for Hypothesis 1b. Next, we regress our measure for weakened networks on the joint Protestant mission dummy. As [figure 4](#) demonstrates, network density—measured using respondents’ ability to find out their neighbor’s age—is consistently lower in villages where Protestant missionaries took root. The treatment effect is strongest in the Pentecostal Maranatha villages ([figure A.7](#)). Here, individuals are 18 percent less likely to find out the age of their neighbors. The evidence thus also provides tentative support for Hypothesis 2b.

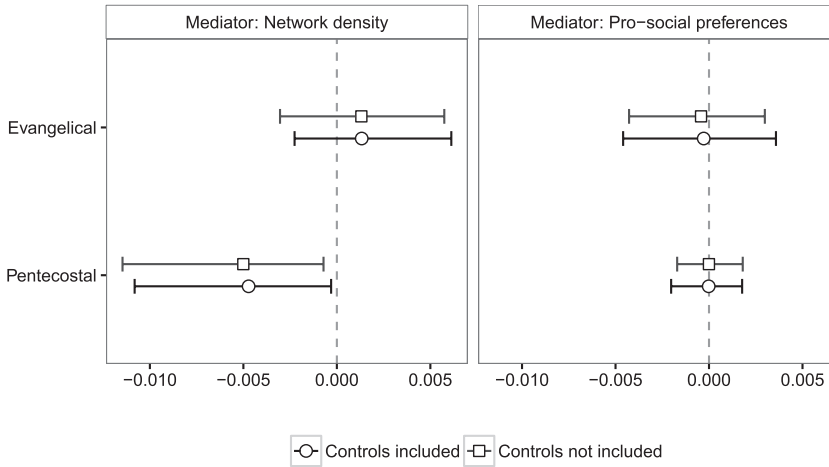
Showing positive effects on the theorized mechanisms, however, is not conclusive evidence for causal mediation. In a next step, we therefore turn to the causal mediation framework proposed by [Imai, Keele, and Yamamoto \(2010\)](#). In order to identify the causal mediation effect of the two mechanisms, one must invoke sequential ignorability, which includes two separate assumptions. First, one must assume that the treatment is ignorable given pretreatment covariates. Second one must assume that the mediators—pro-social preferences and network density—are ignorable given the observed treatment and pretreatment covariates. The second assumption, in particular, is difficult to invoke as it cannot be directly tested. The analysis must therefore be treated with caution. [Figure 5](#) plots the average causal mediation effects. Despite the fact that the mediators, taken in isolation, are negatively correlated with the treatment, only one of them mediates the causal relationship: weakened networks. That is, within Pentecostal villages, weakened networks seem to be a potential causal mediator. The “reduced prosocial preferences”-mechanism, by contrast, seems to exhibit no causal force. As such, the estimates imply that Protestant missionaries reduce community cohesion by weakening social networks, not by changing pro-social preferences. Importantly, this effect is only detectable in Pentecostal villages. The finding thus resonates with the main finding, whereby community cohesion is only significantly lowered in Pentecostal villages ([figure 2](#)).

If Pentecostal missionaries reduce community cohesion by weakening networks, this raises an important question: Do Pentecostals (and, to a lesser extent, Evangelical missionaries) reduce overall cohesion, or do they merely *shift* cohesion from the greater village to the church community? To explore this “club-hypothesis,” we draw on the fact that two pivotal outcome measures of community cohesion—cooperation and identification—randomized the respective group with which the respondent cooperated or identified.<sup>10</sup> In [figures](#)

<sup>10</sup>As was described above, respondents were asked whether they wanted to donate money toward the church community or the village community (identification). Similarly, respondents were asked whether they would be willing to sign a church or a village proposal (cooperation). In both instances, the community was fully randomized across respondents and blocked on gender.



FIGURE 5 Causal Mediation Effect.



Notes: The figures plot average causal mediation effect estimates (dot/square) and 95 percent Bayesian confidence intervals (lines) of regressions of the treatments on the indicated mediators. Dots represent regressions with covariate adjustment, squares represent regressions without covariate adjustment.

A14 and A15, we plot the cooperation and identification measures, as well as an aggregated index, under the two priming conditions. The figure shows that the negative treatment effects are, indeed, more pronounced when individuals are primed with the village condition as compared to the church condition. However, the treatment effects are also negative in the church condition. This finding shows that Pentecostal missionaries reduce community cohesion not just within the village, but also within the respective church community. The evidence thus questions the “club-hypothesis.” Rather than shift cohesion from the village to the church, missionaries reduce community cohesion overall, arguably by undermining social networks.

If Pentecostal missionaries reduce community cohesion within both the church and village community by breaking networks how does this effect come about? While evidence on the precise mechanism is necessarily tentative, we draw on qualitative evidence to provide some clues. Before suggesting two mechanisms, one must recall that we have found that community cohesion is most strongly reduced in Pentecostal villages and that these villages are also the ones where we detect weakened networks (figure 5). By contrast, we find no significant effects on community cohesion in Evangelical villages (figure 3) and also no effect on the proposed network mediator in this subset.

Why, then, do Pentecostal villages show reduced community cohesion, which is presumably mediated by weakened networks? To answer this question, we draw on qualitative evidence, distilled using 32 structured interviews across the villages with village presidents, ministers, and local residents. It is important to note

that the potential causal mechanism must be distinctly Pentecostal. After all, variables such as the construction of a church, regular services, or the preaching of Biblical values do not differ across Evangelical and Pentecostal missionaries. For this reason, we can also rule out pro-social preferences, given that we found no differential effect across Pentecostal and Evangelical villages (see [figure 5](#)).<sup>11</sup> Based on our interviews, we distilled two plausible causal mechanisms, which help us elucidate the negative Pentecostal effect on networks and community cohesion.

A first important difference across Pentecostal and Evangelical villages was the extent and nature of religious services. In interviews with pastors, village presidents, and converts, as well as when attending services ourselves, we learned that Pentecostals differed from Evangelicals predominantly with respect to the time spent in church and the nature of the service. In Pentecostal villages, converts spent many hours each week in church, reading the Bible, reciting verses, and praying. Church services in Adventist and Mixed villages, by contrast, were significantly shorter. As a result, the little time converts in Pentecostal villages had for leisure was predominantly spent in the church, not on the football pitch or the village plaza. As such, there was less time to connect with fellow villagers and arguably an increased likelihood for a long-term reduction in community cohesion. Just as important, however, church services in the Pentecostal missions were also rather serious, subdued, and inward-focused. This qualitative difference can help explain the observed reduction in cohesion *even within* the respective Pentecostal community (see [figure A14](#)). Adventist church services, by contrast, were significantly more cheerful and outgoing. These differences—the length and seriousness of church services—thus helps explain why community cohesion decreased in Pentecostal villages, while we did not detect such differences in Adventist villages (see [figure A14](#)).

A second important difference across Pentecostal and Evangelical villages concerns the strictness of rules. One particularly important difference was the prohibition of alcohol. Both Catholic and, to a lesser extent, Evangelical villages tolerated or even welcomed the consumption of alcohol. The case was decidedly different in Pentecostal churches. They strictly forbade alcohol and frequently reminded believers that alcohol was not tolerated. As one Peruvian village president noted, “they (the residents) changed when the Evangelicals [Pentecostals] came, we no longer drink alcohol and we are committed to our work and no longer focus on parties.” In light of a rather widespread consumption of alcohol across the villages, the prohibition thus created a sharp distinction between Pentecostal converts and Catholics. The result, arguably, was a weakening of the broader village network and a long-term reduction in cohesion. And, the prohibition of alcohol also meant that the Pentecostal church community was less tightly knit compared to the Evangelical or, to a lesser degree, Catholic communities.

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<sup>11</sup>Recall also that pro-social preferences were *not* one of the distilled mediators.

## GENERALIZABILITY

What does the context of Peru and, in particular, the sixteen villages near the city of Cusco tell us about the relationship between Protestant missionaries—and Pentecostal missionaries in particular—and community cohesion more broadly? To our mind, three conditions are particularly important to hold for the observed effects to transport to other contexts.

First, the villages we studied were Christian before the Protestant missionaries arrived. All sampled villages had a Catholic Church building and respondents identified as Christian (see [table A1](#)). The advent of Protestant missionaries, thus, did not represent a profound break with preexisting religious norms or behaviors ([Hoge 1981](#); [Suchman 1992](#)). Protestant missionaries did not, for instance, expose villages to monotheism for the first time ([Baker 2000](#)), nor was the construction of a church, including the offering of services and the convening of reading groups, new. The pivotal religious innovation brought by Protestant missionaries was a focus on individual salvation and, in the case of Pentecostal missionaries, the strict, long services, and clear rules, particularly regarding alcohol. It is these variables that seem to have engendered a profound negative effect on local-level networks, both within the village and within the church community. Without prior exposure to Christianity, the effects of Protestant missionaries would therefore likely have been different. In particular, it is conceivable that the strict focus on individual liberation or the prohibition of alcohol could partly be offset by the construction of a new church building where people come together. In areas without preexisting (Christian) beliefs, one may therefore expect a less pronounced negative effect of Protestant missionaries on community cohesion.

Second, our context can best be described as agrarian. As [table A.2](#) shows, roughly 50 to 60 percent of respondents worked as farmers, while the remainder mostly identified as housewives. Working the steep fields of the Peruvian Andes, the villagers intimately knew each other, bonded over good harvests, and showed a remarkable degree of reciprocity. There was, in other words, a relative absence of economic differentiation. This high degree of social connection matters because it provided a soil within which networks could have been broken. Had the villages already been fully differentiated—shaped by modern economic transactions—the effect on local networks would arguably have been less pronounced. This is not to say that the missionary preachings were accepted as-is by local villagers ([Montero 2012](#); [Scott 1977](#)). But, even taking into consideration a kind of amalgamation between existing Catholic beliefs and Protestantism, the negative effect on networks arguably played out because networks were rather dense before the arrival of the missionaries. In areas shaped by more differentiated social and economic structures, one may therefore expect a less pronounced negative effect of Protestant (more precisely, Pentecostal) missionaries on community cohesion.

Third, it must be reiterated that the villages had prior exposure to (Catholic) missionaries and, even more important, colonialism. To what degree colonialism matters as a contextual mediating variable, however, is difficult to assess, as a vibrant literature on missionaries and colonialism showcases (Comaroff and Comaroff 1986; Gilmour 2007). One may argue that a history of colonialism made it harder for Protestant missionaries to change social structures. After all, the colonial experience in Peru is, partly, one of fighting off outside aggressors. Viewed in this light, the negative effect we observe may thus be a lower bound and one would expect more pronounced effects in settings without a history of colonialism. There is, however, an alternative logic. The history of colonialism and Catholic proselytism may have weakened local residents' propensities to oppose "outsiders," thus giving Protestant missionaries a more ready opportunity to proselytize and change behavior.

## CONCLUSION

This study has explored whether Protestant missionaries affect community cohesion. Studying modern-day Protestant missionaries in southeastern Peru, we found that villages where Evangelical or Pentecostal missions took root are shaped by lower levels of community cohesion. We pointed to weakened social networks as a likely causal channel for this effect. We also demonstrated that the reduction in cohesion holds even within the respective church communities, thereby questioning the well-known "club-hypothesis." Importantly, the reduction in community cohesion was predominantly detectable among Pentecostal missionaries, which we attributed to their long and inward-focused church services and stricter rules regarding behavior, including the prohibition of alcohol.

With these findings at hand, we want to conclude by highlighting two potential shortcomings and thus areas of improvement of this study. First, our study explored two specific mechanisms that link Protestant missionaries to community cohesion: preferences and networks. The rather low average mediated effect of these mechanisms, however, demonstrates the need to investigate more carefully the full universe of plausible causal channels. Several mediators come to mind. While education played a minor role in our setting, the fact that missionaries spur abstract spirituality and time devoted to reading scripture may affect to what degree individuals are cognitively willing to engage with others in their community. Just as important, several mission posts in our sample received funding from abroad, which points to the colonial underpinnings of missionary work (Comaroff and Comaroff 1986). While the priests we interviewed were local Peruvians, it goes without saying that Protestant missions can hardly be conceptualized as "indigenous." Far from it, the presence of foreign missionary groups carries distinct colonial undertones, which may have a lasting effect on traditional societies and local-level cohesion.

Second, the present study has only rudimentarily described the content of the missionary work and preaching. Though we only found weak evidence that preferences mediate the causal relationship between missionaries and community cohesion, we did confirm a strong negative correlation between the presence of missionaries and residents' pro-sociality. This is valuable evidence for the conjecture that religion affects individual-level preferences. One promising pathway to better understand this relationship is to scrutinize sermons in a more systematic manner. When missionaries preach to believers in hour-long sermons, they arguably have profound effects on preferences of interest to social scientists (McClendon and Beatty Riedl 2021). To what degree such effects depend on the ideas contained in theological preachings has, to our mind, received too little empirical scrutiny in the social sciences.

## SUPPLEMENTARY MATERIAL

Supplementary material is available at *Sociology of Religion* online.

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